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| APPLICATION NO.   | FILING DATE              | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|--------------------------|----------------------|---------------------|------------------|
| 10/812,306  | 03/30/2004               | Marvin D. Kubischta  | 02708.0007.NPUS00   | 1801             |
| 22930<br>HOWREY LLP   | 7590 07/03/200<br>P - DC | EXAMINER             |                     |                  |
| C/O IP DOCKETING DEPARTMENT                                     |                          |                      | CRAIG, DWIN M       |                  |
| 2941 FAIRVIEW PARK DR, SUITE 200<br>FALLS CHURCH, VA 22042-2924 |                          | 200                  | ART UNIT            | PAPER NUMBER     |
|   |                          |                      | 2123                |                  |
|   |                          |                      |                     |                  |
|   |                          |                      | MAIL DATE           | DELIVERY MODE    |
|   |                          |                      | 07/03/2008          | PAPER            |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

|  | Application No.   | Applicant(s)                 |  |  |  |  |
|--|---|------------------------------|--|--|--|--|
| Office Action Occurrence   | 10/812,306  | KUBISCHTA ET AL.             |  |  |  |  |
| Office Action Summary  | Examiner  | Art Unit                     |  |  |  |  |
|  | DWIN M. CRAIG   | 2123                         |  |  |  |  |
| The MAILING DATE of this communication app<br>Period for Reply   | ears on the cover sheet with the c  | orrespondence address        |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |   |                              |  |  |  |  |
| Status   |   |                              |  |  |  |  |
| 1)⊠ Responsive to communication(s) filed on <u>09 Ju</u>   | ne 2008   |                              |  |  |  |  |
|  | action is non-final.  |                              |  |  |  |  |
| 3) Since this application is in condition for allowar  |   | secution as to the merits is |  |  |  |  |
| •  | closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. |                              |  |  |  |  |
| Disposition of Claims  |   |                              |  |  |  |  |
| 4)⊠ Claim(s) <u>1-22</u> is/are pending in the application.  |   |                              |  |  |  |  |
| 4a) Of the above claim(s) is/are withdray  | 4a) Of the above claim(s) is/are withdrawn from consideration.                                    |                              |  |  |  |  |
| 5) Claim(s) is/are allowed.  |   |                              |  |  |  |  |
| 6)⊠ Claim(s) <u>1-22</u> is/are rejected.  |   |                              |  |  |  |  |
| 7) Claim(s) is/are objected to.  |   |                              |  |  |  |  |
| 8) Claim(s) are subject to restriction and/or  | election requirement.   |                              |  |  |  |  |
| Application Papers   |   |                              |  |  |  |  |
| 9)☐ The specification is objected to by the Examiner.  |   |                              |  |  |  |  |
| 10) The drawing(s) filed on is/are: a) acce  |   | Examiner.                    |  |  |  |  |
| Applicant may not request that any objection to the  |   |                              |  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).   |   |                              |  |  |  |  |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.   |   |                              |  |  |  |  |
| Priority under 35 U.S.C. § 119   |   |                              |  |  |  |  |
| <ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>  |   |                              |  |  |  |  |
| Attachment(s)  1) X Notice of References Cited (PTO-892)   | 4) 🔲 Interview Summary  | (PTO-413)                    |  |  |  |  |
| 2) DNotice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Da   | ite                          |  |  |  |  |
| Information Disclosure Statement(s) (PTO/SB/08)     Paper No(s)/Mail Date  | atent Application   |                              |  |  |  |  |
|  |   |                              |  |  |  |  |

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## **DETAILED ACTION**

1. In view of the arguments set forth in the Interview on 29 May 2008, PROSECUTION IS HEREBY REOPENED.

2. Claims 1-22 have been presented for reconsideration based on Applicants' arguments as presented in the interview summary for 29 May 2008.

## Response to Arguments

- 3. Applicant's arguments, see response to the final rejection, filed 3/27/2008 with respect to Claims 1-22 have been fully considered and are persuasive. The 35 U.S.C. 103(a) rejections of claims 1-22 has been withdrawn.
- 3.1 More specifically the argument that *James* fails to teach that a continuous clock is being provided to a non-real-time simulator as expressly argued on page(s) 7 & 8 has been persuasive and therefore the previously applied prior art rejections have been withdrawn.
- 3.2 As regards the 35 U.S.C. § 101 rejections of claims 17-22, Applicants' have clearly stated in the 6/9/2008 responses that the computer readable storage medium being claimed is neither a wire or a fiber optic cable nor a signal on a carrier wave, see pages 7 & 8 of the 6/9/2008 responses, and therefore the previously applied 35 U.S.C. § 101 rejections of claims 17-22 have been withdrawn.
- **3.3** An updated search has revealed new art.

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## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 1-22 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 6,134,514 to Liu et al.
- As regards independent claims 1, 7 and 17 and using independent claim 1 as an example, Liu et al. discloses, providing a continuous real-time clock to a non real-time simulator (Col. 11 lines 40-67 and Col. 12 lines 1-6 more specifically starting on line 40, "Synchronization between real-time events (occurring in the physical network) and simulated events at the SPs, requires that the determination involved in module 110 of FIG. 9 be made on the basis of a real time clock." Here is a teaching of a continuous real-time clock being provided to a non-real time simulator, in this case OPNET, more specifically see the teaching in Col. 5 lines 51-63 more specifically starting on line 52 "In the preferred embodiment, the simulation tool deployed is OPNET- a commercially available discrete event simulation tool suite intended for communications networks in general.") and

Synchronizing a simulation clock of the non-real time simulator with the continous realtime clock on a continuous bases (see Figure 1 and Col. 5 lines 60-63 and starting on Col. 8 line 27, "Each of the SPs include a <u>synchronizer</u> feature that capitalizes on event scheduling information provided by OPNET at each SP, and interacts with a <u>synchronizer</u> of the system Application/Control Number: 10/812,306

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controller **60**..." and Col. 9 line 34, "Upon detection of a synchronization event, the kernel releases control back to the synchronizer and the processing beginning in module **30** is repeated..." and all of Col. 11 lines 11-67 and Col. 12 lines 1-12) and

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advancing the non real-time simulator to a first time based on the simulation clock reaching the first time (Col. 8 lines 2-9 more specifically, "...and the advancing of a simulation clock. Since all future simulation events are stored in an event list and forwarded in an ascending order of simulation time, the pace of the execution of the simulation events can be regulated by manipulating the events in the event list...").

- 4.2 As regards claims 2, 8 and 18 and using claim 2 as an example, Liu et al. discloses advancing the non-real-time simulator to a second time based on the simulation clock reaching the second time (Col. 8 lines 2-9 more specifically, "...and the advancing of a simulation clock. Since all future simulation events are stored in an event list and forwarded in an ascending order of simulation time, the pace of the execution of the simulation events can be regulated by manipulating the events in the event list..." see also Figure 6).
- 4.3 As regards claims 3, 9 and 19 and using claim 3 as an example, *Liu et al.* discloses, receiving an event for the non-real time simulator at a second time on the continuous real time clock (Figure 6 and Col. 8 lines 2-9) and advancing the non-real time simulator to a time on the simulation clock equivalent to the second time on the continuous real time clock (Figure 6 and Col. 8 lines 2-9).
- 4.4 As regards claims 4 and 20 and using claim 4 as an example, *Liu et al.* discloses, submitting the event to the non-real time simulator for simulation at the time on the simulation clock (Figure(s) 6, 8 & 9 and the descriptive text further see Col. 11 lines 1-10 this portion

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describes how the simulation clock is advanced depending on which simulator is being executed, see also Col. 11 lines 41-65, see also Figure 12 and the descriptive text).

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- 4.5 As regards claims 5, 6, 21 and 22 and using claim 5 as an example, *Liu et al.* discloses the functional equivalent of *instantiating a call-back function* see (Col. 10 lines 38-63, note the discussion about how when the process is complete, processing *returns* to module 20, further see Col. 9 lines 18-36 more specifically, "Module 85 then *calls* module 100 so that a *synchronization event* is then started behind the updated event" note that one module is *calling* another module, this describes the functional equivalent of using a *callback*).
- **4.6** As regards claim 10, *Liu et al.* discloses, wherein the controller module is further configured to map the event time to a simulation event time and to advance the non real-time simulator to the simulation event time (Figure(s) 1, 6 & 12 and Col. 5 lines 60-63 and Col. Col. 8 lines 1-10 and Col. 8 lines 28-56).
- **4.7** As regards claim 11 *Liu et al.* discloses, wherein the controller module is further configured to forward the event to the non real-time simulator (see Figure 6 and the descriptive text).
- As regards claim 12 *Liu et al.* discloses, a configuration entity configured to provide configuration to the control module (here is a teaching that the controller is configured before use, see Figure 7 item 10 and Figure 8 item 60 and Figure 9 item 10 and Figure 11 and Col. 9 lines 57-67 and Col. 10 lines 1-27 more specifically, starting at Col. 9 line 57, "Referring now to FIG. 9, the synchronizer is initialized in step 10." The synchronizer is part of the controller see Figure 8).

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**4.9** As regards claim 13 *Liu et al.* discloses the same functionality of *wherein the* configuration entity is a scenario generator (see Col. 8 lines 5-8 which describe the list of events in an event list, that event list is functionally the same as a scenario.).

- **4.10** As regards claim 14, *Liu et al.* discloses, a messaging entity configured to provide messages for simulation to the controller module (Figures 11 & 12 and the descriptive text).
- **4.11** As regards claim 15, *Liu et al.* discloses, *wherein the messaging entity is a radio emulator* (Col. 5 lines 66-67 and Col. 6 lines 1-6 and Col. 7 lines 6-64, "In other words, simulated radio nodes could not function properly...").
- 4.12 As regards claim 16, Liu et al. discloses wherein the controller module further comprises: a real-time controller loop configured to the non real-time simulator a traffic output module adapted to accept output messages from the non real-time simulator a traffic input module adapted to receive input messages from a messaging entity; and a packet queue configured to buffer input and output messages (Figures 1-12 and the descriptive text more specifically see Col. 5 lines 37-67 and Col. 6 lines 1-7 see also Col. 7 lines 56-67 and Col. 8 and Col. 9 lines 1-36 and Col. 11 lines 40-67 and Col. 12 lines 1-6).

## Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DWIN M. CRAIG whose telephone number is (571)272-3710. The examiner can normally be reached on 10:00 - 6:00 M-F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Paul L. Rodriguez can be reached on (571) 272-3753. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

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information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Zoila E. Cabrera/

Primary Examiner, Art Unit 2123